Three Modifications to OEM Blade Guards for Cabinet & Contractors Saws

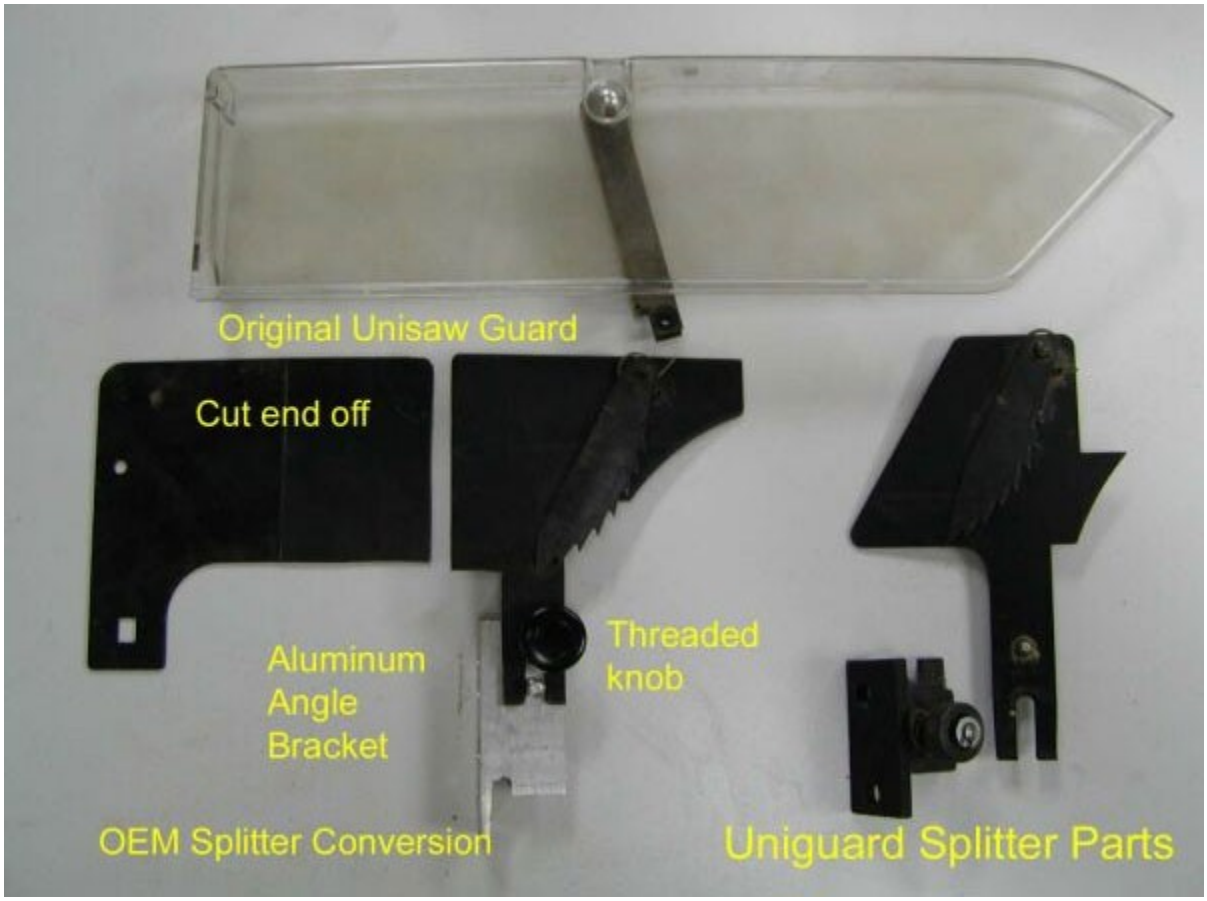
by Garrett Lambert, Barb Siddiqui, & Carol Reed "The Router Lady"

Unisaw by Garrett Lambert

I'd been using my Unisaw without a guard. Obviously dangerous, but a conscious decision, so no need to tell me what I already know. None of the guards I've tried are convenient, and some of them encourage other dangerous practices in order to get around their limitations.

However, when a friend lost a few fingers, I decided to make something that would let me see the work, but also increase my safety factor considerably. Commercial units shroud the blade to offer maximum protection from any eventuality, but after 60 years of cutting things on tablesaws with only minor blood-letting, I believe the greatest danger for me comes from the likelihood of inadvertence, i.e. an unthinking movement when tired or distracted.

I have both the Unisaw's OEM guard, as well as a Uniguard. Looking at the Uniguard splitter gave me an idea. I disassembled the OEM guard, removed the splitter, and cut off the long tail so that it was about the same size as the Uniguard's model. The metal is quite soft so this would be an easy task by hand, although I used my power hacksaw.



I then took a 4" long piece of 2x2 aluminum angle out of my junk box, and drilled 5/16" holes to match those in the saw trunnion. I was able to measure from the Uniguard bracket, for it would have been harder to measure the trunnion holes. They're offset slightly just to make it more interesting, so I think I might have used the old brass rubbing technique, i.e. place a piece of paper over the holes and rub a piece of charcoal over the paper. I left the bottom hole as is, but used a file to elongate the upper one slightly sideways to give me a bit of adjustment. I then mounted the bracket and put a 1/8" kerf ripping blade on the arbor in the highest position. With a small spring clamp, I attached the new splitter to the bracket and checked to see if it lined up. Perfect first time out.

I put pencil marks on the bracket to indicate the height, and then removed everything.

I drilled and tapped a 5/16" hole for a 1" bolt that serves to position and hold the tang of the splitter. After rummaging around I found a small knob that had a machine screw attached, and with the splitter clamped to the bracket, drilled a 7/32 hole and tapped the bracket portion for the knob's metric thread. I then re-drilled the hole in the splitter out to ¼". To re-cap, the splitter is held in position by a combination of a through bolt and the positioning stud so that it cannot be forced out of position.

Finally, I made the wooden guard in the photo below, cut the back slot, assembled everything and mounted it.

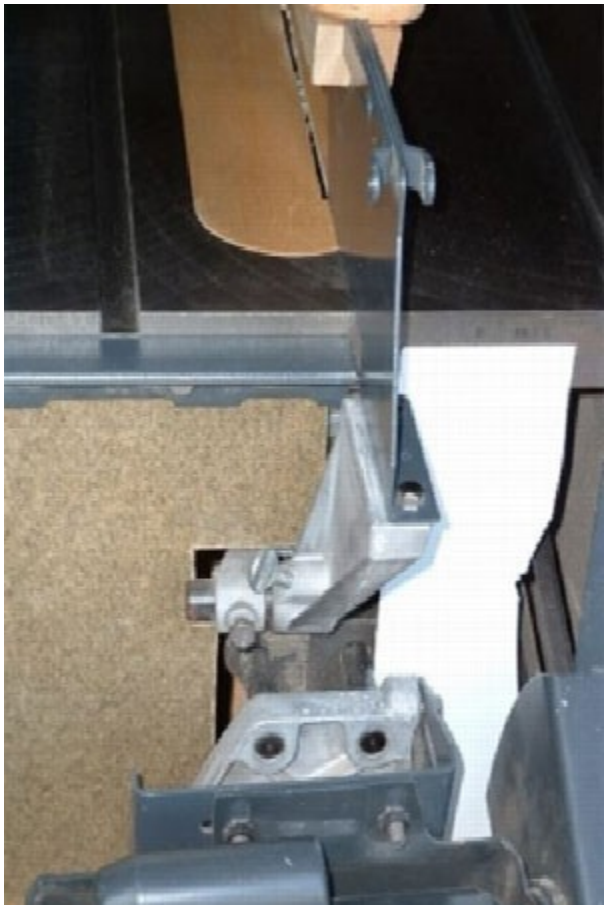
The total build time was about 3 hours.

It's easy to install and remove, and offers full visibility for all through cuts. So far, it's stood the test of time, and since posting this on several WW boards, others have made a few improvements, eg mounting a wide clear plastic shield instead of the wooden arm.

Sears Contractor Saw by Barb Siddiqui

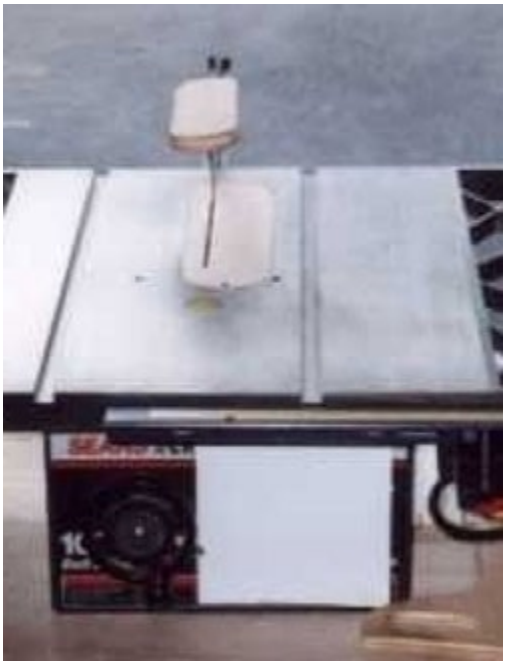
Carol Reed's guard - see below - is an obvious improvement on my very 'homemade' but also very useful crown guard for my Sears contractor's saw.

The standard blade guard that came with it was more a hindrance to safe woodworking than a help. I decided to take the advice of Tage Frid, as presented in his Tage Frid Teaches Woodworking, Vol. 1-2 (Taunton Press; see the Wood Central book review pages) and tear the thing apart to adapt its splitter to my own shop-built crown guard.



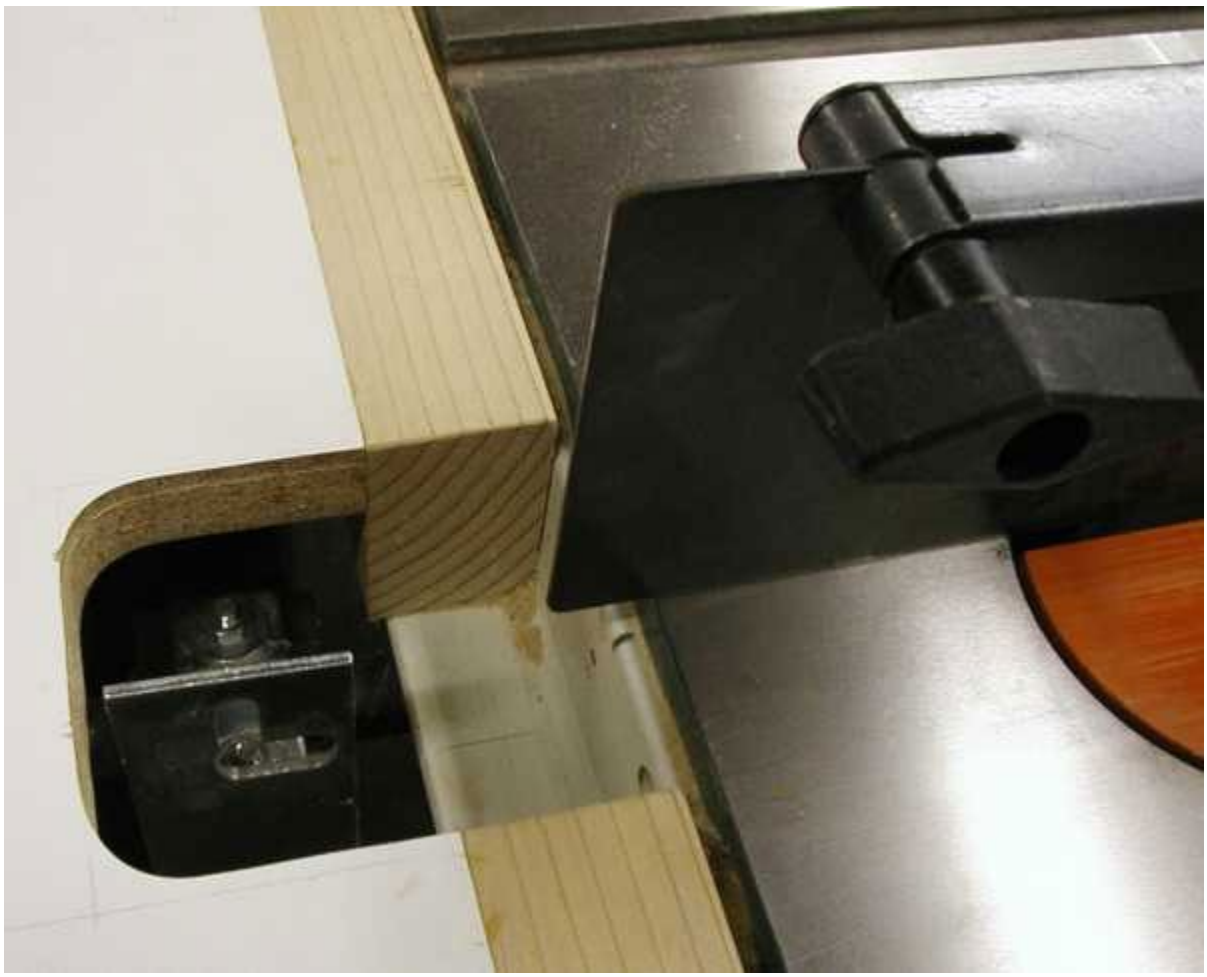
The plastic cover came off, the pawls were removed, and I glued/pinned a narrow piece of wood on each side of the standing splitter. These support a hot-dog shaped crown of 3/4" plywood, glued and screwed on above them.

This particular saw allows an easy on-off at the rear, above the motor, with a thumbscrew attachment. (The surrounding hardboard and white material is a magnetic vent-cover, cut to block air flow so a shop vacuum has more draw to collect dust from below the tablesaw. Another magnetic vent cover seals up the front of the saw.)



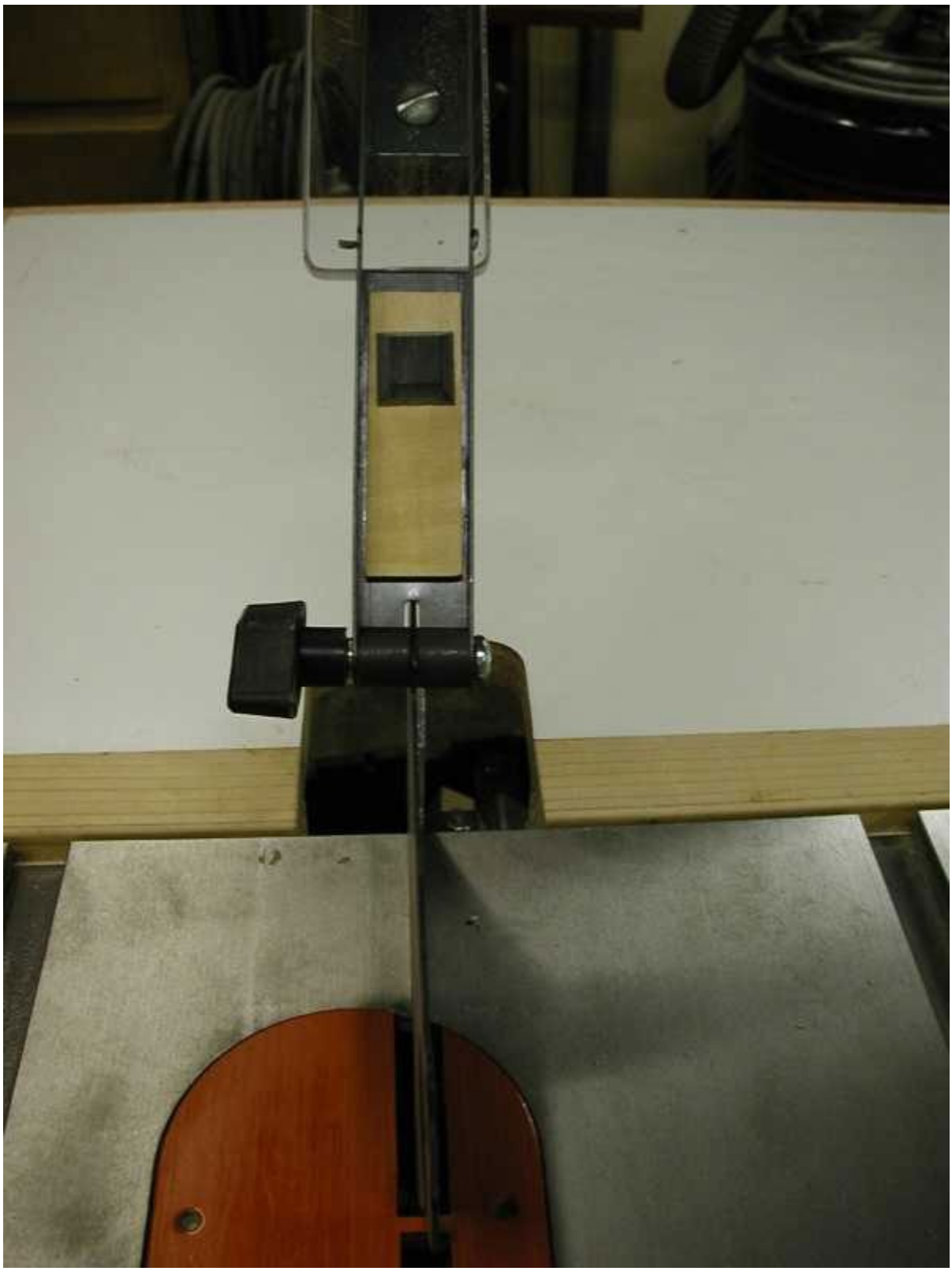
Grizzly 1023 Cabinet Saw by Carol Reed, "The Router Lady"

I modified the original splitter/blade guard that came with my Grizzly 1023. I didn't think it was worth much to begin with, so I had no problem disassembling and modifying it.

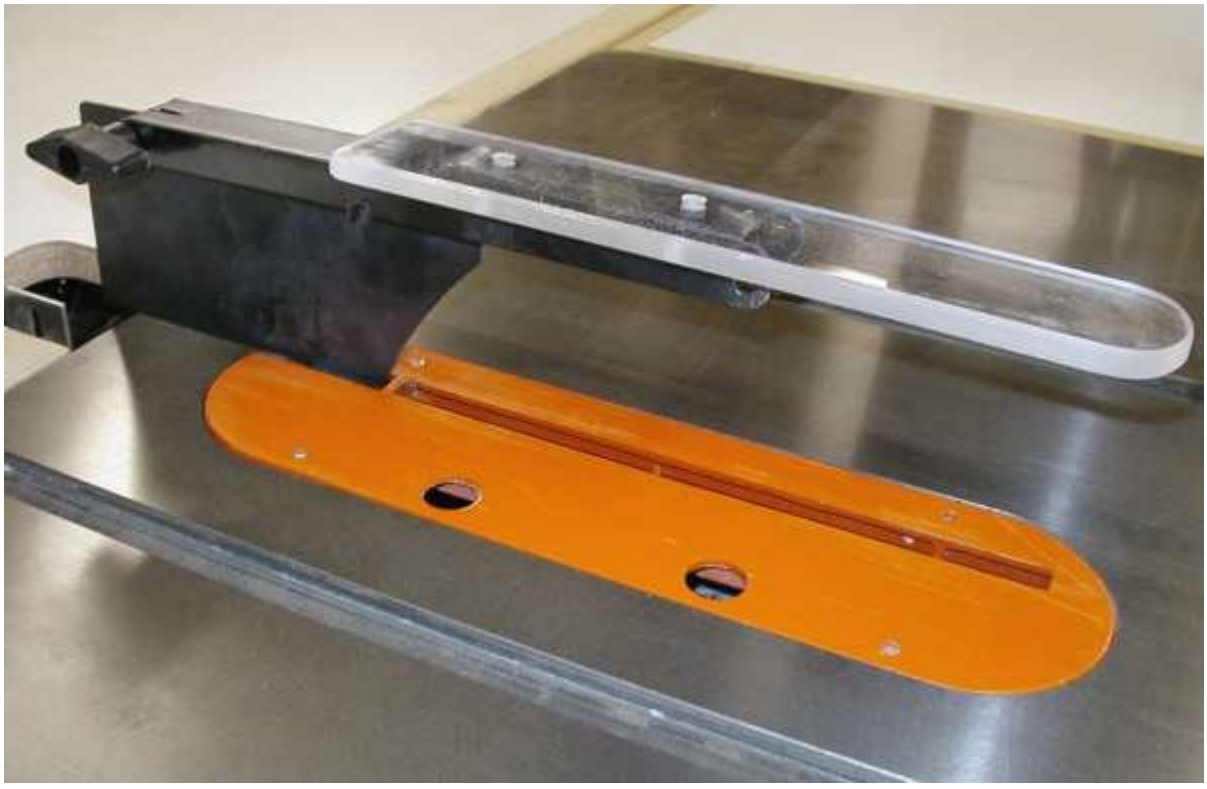


This view shows the back of the table bracket the splitter used to be fastened to. You can see how much shorter I cut the splitter.

Here's the mounting system.



I also removed the pawls as they have always frustrated me when using my push stick, especially with skinny rips. This also shows the small piece of 1/8" plywood

and rubber bumper from Radio Shack I glued to cushion the metal guard from the metal splitter. Made things quieter and leveled the blade guard.

Then I removed the plastic guard and installed a 'hot dog bun' shaped plastic saw guard (Thanks, Barb Siddiqui.). It's fastened to the splitter with a machine screw and plastic knob and is easily removed when the cuts get so skinny I can't get my push stick in there at all. The guard works well deflecting saw dust from my face (its primary function). It should also deflect a kickback. Since these usually happen when cutting small pieces of wood without an adequate push stick, it should work. Fortunately, I haven't had the opportunity to test that thought!